10/797,456
January 17th, 2006
Reply to Office Action of 11/25/2005

Via Facsimile

Listing of the Claims

This listing of the claims shall replace all previous listings:

1. (Currently Amended) Semi-conducting thin sheet wedges comprising:
a mica matrix, wherein said mica matrix comprises mica flakes; and
a conductive resin impregnated within said mica matrix;
wherein said thin sheet wedges have a semi-conductive property of between 500-500,000 ohms per square;
whereby said semi-conducting thin sheet wedges are thin sheet wedges.

2. (Original) The semi-conducting thin sheet wedges of claim 1, wherein said thin sheet wedges have a thickness of between about 15-80 mils (0.38-2.0 mm).

3. (Original) The semi-conducting thin sheet wedges of claim 1, wherein said mica flakes comprise at least one of muscovite, phlogopite and combinations thereof.

4. (Original) The semi-conducting thin sheet wedges of claim 1,wherein said resin comprises approximately 15-40% by weight of said thin sheet wedges.

5. (Original) The semi-conducting thin sheet wedges of claim 1, wherein said resin is C-black.

6. (Original) The semi-conducting thin sheet wedges of claim 1, wherein said thin sheet wedges have a tensile modulus of between 1-8 million PSI.

7. (Original) The semi-conducting thin sheet wedges of claim 1, wherein said thin sheet wedges further comprises at least one glass fiber layer.

8. (Original) The semi-conducting thin sheet wedges of claim 7, wherein the ratio of the mica in said mica matrix to the glass fiber is approximately between 2:1 and 7:1 by weight.

9. (Original) The semi-conducting thin sheet wedges of claim 7, wherein said at least one glass fiber layer forms a backing for said mica matrix.

10. (Original) The semi-conducting thin sheet wedges of claim 7, wherein said at least one glass fiber layer is interwoven with said mica matrix.

11. (Original) The semi-conducting thin sheet wedges of claim 10, wherein said at least one glass fiber layer is interwoven in a half-lap manner.

12. (Currently Amended) Semi-conducting thin sheet wedges comprising:

a mica matrix, wherein said mica matrix comprises mica flakes;

at least one layer of glass fiber; and

a conductive resin impregnated within at least one of said mica matrix and said at least one layer of glass fiber;

wherein said thin sheet wedges have a semi-conductive property of between 500-500,000 ohms per square;

wherein said thin sheet wedges have a tensile modulus of between 1-8 million PSI;

whereby said semi-conducting thin sheet wedges are thin sheet wedges.

13. (Original) The semi-conducting thin sheet wedges of claim 12, wherein the ratio of the mica in said mica matrix to the glass fiber is approximately between 2:1 and 7:1 by weight.

14. (Original) The semi-conducting thin sheet wedges of claim 12, wherein said at Least one glass fiber layer forms a backing for said mica matrix.

15. (Original) The semi-conducting thin sheet wedges of claim 12, wherein said at least one glass fiber layer is interwoven with said mica matrix.

16. (Original) The semi-conducting thin sheet wedges of claim 15, wherein said at least one glass fiber layer is interwoven in a half-lap manner.

17. (Original) The semi-conducting thin sheet wedges of claim 12, wherein said mica flakes comprise at least one of muscovite, phlogopite and combinations thereof.

18. (Original) The semi-conducting thin sheet wedges of claim 12, wherein said resin comprises approximately 15-40% by weight of said thin sheet wedges.

19. (Original) The semi-conducting thin sheet wedges of claim 12, wherein said resin is C-black.

20.(Currently Amended) A method for making semi-conductive thin sheet wedges comprising:

layering a mica matrix onto a glass fiber backing, wherein said mica matrix comprises mica flakes;

impregnating into said mica matrix and said glass fiber a conductive resin; and

curing said conductive resin;

whereby said semi-conducting thin sheet wedges are thin sheet wedges.